

**Groundwater Advisory Committee (GAC)**  
**Meeting Minutes: October 19, 2005, 10:00 – 1:00**  
**Wisconsin Department of Natural Resources, Conference Room 511,**  
**GEF II building, 101 South Webster, Madison**

**Committee members in attendance:** Ron Kuehn, DuWayne Johnsrud, Todd Ambs, Dan Duchniak, Lawrie Kobza, Jodi Habush Sinykin, Mike Carter, Robert Nauta, Stuart Gross, Andrew Graham, David Holdener, Carol McCartney.

\*Presentations and other materials referenced in the minutes can be found on the GAC web page:  
<http://dnr.wi.gov/org/water/dwg/gac/index.htm>

1. **Welcome and Introductions** - Ambs explained that the DNR was having problems updating the GAC webpage and that those problems would be handled in the near future. The agenda was modified to add a report on the progress of the springs projects by Dave Hart (for Ken Bradbury) and to add a summary of the NR 150 environmental review process by Chuck Hammer.
2. **Approval of August Meeting Minutes** – Ambs moved and Nauta seconded the motion to approve. The minutes were approved unanimously as written.
3. **Projected Groundwater Rebound in Lower Fox River Valley (see presentation on website)** – Jim Krohelski discussed the groundwater level recovery after the City of Green Bay's pipeline to Lake Michigan was installed in 1957 and the expected groundwater level recovery when other nearby utilities are supplied by lake water in the next few years. Krohelski estimated that future recovery will be similar to the recovery of 1957, on the order of 200 feet with about 130 feet of recovery occurring in the first 6 months and about 70 feet in the following 3 years. Krohelski noted that 3 of the 4 observation wells used to monitor drawdown in the Lower Fox River Valley have been lost and that plans to monitor the 2006 recovery need to be made. The following items were discussed:
  - Whether and how to de-list a groundwater management area.
  - What type and where potential problems may occur as a result of future groundwater level recovery.
  - The limitations of current data available on pumping rates of high-capacity wells.
  - What monitoring is needed in the GMA.
4. **Public Service Commission water usage rate structure (see presentation on website)** – David Sheard described water use rate structures in Wisconsin and compared it to other areas. The following items were discussed:
  - Rates for residential users vs. industrial users
  - Municipal systems mandatory connection policies.
  - Conservation measures and wastewater reuse.
5. **Springs research update** – Dave Hart (for Ken Bradbury) of the Wisconsin Geological and Natural History summarized the state of springs knowledge in Wisconsin. Some findings from the four projects currently addressing springs in Wisconsin include:
  - Historical documentation has been useful for locating springs but sketchy and unreliable regarding flow information.

- UW–Eau Claire investigators have found only 8 springs in Brown and Calumet counties. The highest flow is about 1/3 cfs.
- UW–Green Bay investigators have found 72 springs in St. Croix county, with 7 of them > 1cfs.
- UW and Beloit College investigators working in Iowa and Waukesha counties have found that historic information indicates there are about 13 springs over 200 gpm (< ½ cfs) but field verification hasn't occurred.

The Wisconsin Wildlife Federation (WWF) is determining which historic springs are on public vs. private land. WWF has also been setting up a statewide spring database.

A Beloit College investigator is attempting to use a spring classification system based on the physical, biological, and sociocultural characteristics of typical spring systems to make assessments of the ecological status of typical spring systems in Wisconsin. This is a first step in assessing vulnerability to pumping because it provides baseline conditions to which changes can be compared. The ecological perspective can be valuable in identifying vulnerable springs with highly complex ecosystems that may not have flow of over 1cfs. This leads to the question of "why are we protecting these springs?" While a good starting point, protecting high-flow springs may not necessarily protect sensitive spring ecosystems.

Hart discussed some of the difficulties in using the statutory definition of a spring. To accurately characterize the flow variability of a stream (and to establish whether a spring's flow is "greater than 1 cfs at least 80% of the time") many years of flow information is needed. Other ways of characterizing flow include using certain species as indicators of perennial flow and using the Q10/Q90 ratio or other flow statistics.

Another question is how to define springs that don't discharge "at the surface of the land". If the spring definition does not include those that discharge underwater, then these springs may not be adequately protected, even if they are in groundwater protection areas.

6. **Great Lakes Annex Update (see presentation on website)** – Linda Talbot of the DNR's Office of Great Lakes described the current status of the Annex Implementing Agreements. The following items were discussed:
  - How does state law relate to federal law?
  - Water conservation

7. **Groundwater Protection Area Subcommittee status report**

Other States Information (handouts on website) – McCartney and Nauta presented three documents listing groundwater management efforts in other states and countries. The documents are:

- Groundwater Management Program Goals
- State High Capacity Well Restrictions
- State Water Planning Guidance

Committee Process for Dealing with Action Items – Kuehn proposed that the committee schedule action items for each meeting. No item need be acted on the first time it is presented. Action items would be put forward through the two subcommittee chairs (Kuehn and Kobza). There was general consensus that this would be a valuable process for bringing forward ideas though care must be made to identify interrelationships between action items.

Summary of the NR 150 Environmental Review Process ( handout on website) – Chuck Hammer of DNR's Bureau of Legal Services presented an overview of the Wisconsin Environmental Policy Act (WEPA) process. It was suggested that a flow chart be developed to visually represent the screening process.

Groundwater Protection Area Subcommittee Task List (handout on website) – Kuehn handed out "A Task List for the Groundwater Protection Area Subcommittee".

8. **Groundwater Management Area Subcommittee status report (presentation and handouts on website)** – Kobza presented an overview of subcommittee progress including a draft rule she developed on Groundwater Management Area Planning based on NR 121. Kobza is looking for input on how this might work. Johnsrud asked if DNR is developing administrative rules. Ambs reported that most of the Act 310 work is on hold until staff are hired. He added that this makes for a very tight timeline. The DNR will not proceed with implementing a GMA strategy unless the GAC fails to do so by the deadline (as per statute). Regarding DNR staff assistance to subcommittees, Ambs said DNR staff assistance would be very limited until new staff are hired, probably in the next 3 months. The committee is encouraged to utilize the technical workgroups. If subcommittees would like to meet at GEF II they should contact Jeff Helmuth ([Jeffrey.helmuth@dnr.state.wi.us](mailto:Jeffrey.helmuth@dnr.state.wi.us), 608-266-5234) who will arrange for a meeting room.
9. **Next Meeting and adjournment** – The next meeting will be on December 2<sup>nd</sup>, 2005 from 10:00 – 1:00 in Room G09 in the GEF II building. Meeting dates for 2006 will be set by the co-chairs and distributed by email in the coming weeks. Meetings will continue to be every two months but will move to Thursdays.